

a backplate combined with the faceplate to form a vacuum tight cell;
an image production unit provided within the cell to produce display images from the cell;
a plurality of spacers mounted within the cell such that the spacers are placed at a non-display area and extend substantially across the cell, the spacers being held between the faceplate and the backplate, wherein each of the plurality of spacers includes a plurality of exhaust grooves to enable fluid gas flow within the cell;

a pair of alignment members connected to the spacers such that the spacers and alignment members form an integral spacer body, to align the spacers at the non-display area in a constant manner; and

a pair of subsidiary alignment members, wherein the subsidiary alignment members are attached substantially perpendicular to the alignment members to form a substantially rectangular spacer holding state reinforcement frame enclosing the spacers.

2. The flat panel display of claim 1, wherein each alignment member is connected to one-sided end portions of the spacers.

3. The flat panel display of claim 1, wherein a longitudinal axis of each spacer is positioned substantially parallel to a side of the cell.

6. The flat panel display of claim 1, wherein the exhaust grooves of each spacer are positioned along a length of the spacer while being spaced apart from each other by a predetermined distance.

7. The flat panel display of claim 1, wherein each spacer is provided with a plurality of image distortion prevention grooves.

8. The flat panel display of claim 7, wherein the image distortion preventing grooves of each spacer are positioned along a length of the spacer while being spaced apart from each other by a predetermined distance.

9. (twice amended) The flat panel display of claim 7, wherein the exhaust grooves are

positioned adjacent to the backplate and the image distortion grooves are positioned adjacent to the faceplate, and wherein the image distortion preventing grooves are in one to one correspondence with the exhaust grooves with respect to a longitudinal axis of the spacer.

10. The flat panel display of claim 1, wherein each alignment member is formed with a plurality of exhaust grooves.

11. The flat panel display of claim 10, wherein the exhaust grooves of the alignment member are positioned along a length of the alignment member.

12. The flat panel display of claim 11, wherein the exhaust grooves of the alignment member are arranged symmetrical to each other with respect to a longitudinal axis of the alignment member.

13. The flat panel display of claim 4, wherein each subsidiary alignment member is provided with a plurality of exhaust grooves.

14. The flat panel display of claim 13, wherein the exhaust grooves of the subsidiary alignment member are positioned along a length of the subsidiary alignment member while being spaced apart from each other by a predetermined distance.

15. The flat panel display of claim 14, wherein the exhaust grooves are arranged symmetrical to each other with respect to a longitudinal axis of the subsidiary alignment member.

16. The flat panel display of claim 1, wherein the image production unit comprises:
a plurality of cathode electrodes formed at the backplate in a predetermined pattern;
an insulating layer formed at the backplate, the insulating layer having a plurality of breakthrough holes formed over the cathode electrodes;
a plurality of emitters contacting the cathode electrodes, each emitter being disposed within one of the breakthrough holes;
a plurality of gate electrodes formed on the insulating layer in a predetermined pattern,

the gate electrodes having openings communicating with the breakthrough holes;
an anode electrode formed on the faceplate and facing the gate electrodes; and
a plurality of phosphor layers formed on the anode electrode in a predetermined pattern.

17. The flat panel display of claim 1, wherein the vacuum degree of the cell is kept to be substantially 10^{-7} torr.

18. (amended) A spacer apparatus for a flat panel display, the spacer apparatus comprising:

a plurality of spacers for mounting within a vacuum tight cell of a flat panel display such that the spacers are placed at a non-display area and extend substantially across the cell;

a pair of alignment members connected to the spacers such that the spacers and alignment members form an integral spacer body, to align the spacers at the non-display area in a constant manner, wherein each of the plurality of spacers includes a plurality of exhaust grooves to enable fluid gas flow within the cell; and

9, a pair of subsidiary alignment members, wherein the subsidiary alignment members are attached substantially perpendicular to the alignment members to form a substantially rectangular spacer holding state reinforcement frame enclosing the spacers.

20. (amended) The spacer apparatus of claim 18, wherein the exhaust grooves of each spacer are positioned along a length of the spacer while being spaced apart from each other by a predetermined distance, and wherein each spacer is provided with a plurality of image distortion prevention grooves, the image distortion preventing grooves of each spacer being positioned along a length of the spacer while being spaced apart from each other by a predetermined distance, and wherein the image distortion preventing grooves are in one to one correspondence with the exhaust grooves with respect to a longitudinal axis of the spacer.

REMARKS

The above identified patent application has been amended and reconsideration and reexamination are hereby requested.

Claims 1 - 3, 6 - 18 and 20 are now in the application. Claims 4 and 19 have been